

DOCUMENT RESUME

ED 033 568

EF 003 840

AUTHOR Isler, Norman P.
TITLE Temporary School Facilities. An Annotated Bibliography.
INSTITUTION Wisconsin Univ., Madison. ERIC Clearinghouse on Educational Facilities.
Pub Date Dec 69
Note 16p.

EDRS Price MF-\$0.25 HC-\$0.90
Descriptors *Bibliographies, *Classrooms, Flexible Facilities, *Mobile Classrooms, *Prefabrication, School Buildings, *School Construction

Abstract

Covered are references to documents received and processed to date by the ERIC Clearinghouse on Educational Facilities concerned with temporary, portable, or mobile schools and classrooms. Documents include publications by state departments of education, Educational Facilities Laboratories, the Association of School Business Officials, and the American Plywood Association. (Author)

ED033568

**CLEARINGHOUSE ON
EDUCATIONAL
FACILITIES**

ERIC CEF

EDUCATIONAL RESOURCES INFORMATION CENTER • 606 STATE STREET, ROOM 314 • MADISON, WIS. 53703

TEMPORARY SCHOOL FACILITIES

An Annotated Bibliography

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY

EF 003 840

ED033568

TEMPORARY SCHOOL FACILITIES

An Annotated Bibliography

Prepared By

Norman P. Isler

Subject Area Coordinator

The work presented herein was performed pursuant to a contract with the U.S. Office of Education, Department of Health, Education and Welfare (OEC-1-7-070883-5095)

ERIC Clearinghouse on Educational Facilities

The University of Wisconsin

Madison, Wisconsin

December 1969

FOREWORD

The Educational Resources Information Center - Clearinghouse on Educational Facilities (ERIC/CEF) is a clearinghouse of information about sites, buildings and equipment used for educational purposes; included are the efficiency and effectiveness of activities such as planning, financing, utilizing, and evaluating educational facilities.

ERIC/CEF is part of a national network of 19 clearinghouses each covering a different field of educational research. The information from all these clearinghouses is reported monthly in RESEARCH IN EDUCATION (RIE), a publication of the U.S. Government Printing Office (annual subscription: domestic \$21.00, foreign \$26.25).

Many of the documents reported in RIE are available from the ERIC Document Reproduction Service. This service is currently provided by the National Cash Register Company, 4936 Fairmont Ave., Bethesda, Maryland 20014. Individual documents may be obtained on microfiche at \$0.25 for each 57 pages or fewer. Facsimile documents are available at approximately \$0.05 per page. Standing orders of all documents related to certain topics are available at 8.4 cents per fiche.

Since January, 1968 approximately 900 documents have been submitted by ERIC/CEF for inclusion in RIE. In addition, approximately 3,000 documents have been accumulated in a local collection which will serve more specialized interests. While the clearinghouse collection does include textbooks, dissertations, and journal articles, the prime mission of ERIC/CEF is to locate and report on documents that are not well known nor widely distributed.

Because of the large number of requests concerned with the acquisition of information relating to temporary, portable, or mobile schools and classrooms, received by ERIC/CEF within the past several months, it was decided that compilation of a bibliography in that area was in order. The following references are the result of that compilation.

The references contained herein are drawn from the documents received and processed to date by ERIC/CEF. They are not represented as a comprehensive list of information on the subject. However, many of the documents are not widely circulated and are therefore useful in expanding existing information.

Howard E. Wakefield
Director

December 1969

TEMPORARY SCHOOL FACILITIES

EF 001294

South Carolina Guide and Minimum Specifications for Mobile
Classroom Units

Published - June 1966
016 pages

Descriptors:

*Design Needs, *Mobile Classrooms, *School Construction, *State Standards, Building Materials, Controlled Environment, Equipment, School Safety, Space Requirements, State Laws

This guide of required and recommended standards for mobile classroom units is intended to 1) provide a guide to local school authorities to assist them in determining the feasibility of mobile units, 2) set minimum safety and utility requirements for mobile units, 3) assure local school authorities of a mobile unit meeting the above requirements and at the same time give them a freedom of selection, and 4) set forth certain minimum mandatory requirements that must be complied with by any manufacturer, vendor, or contractor. Procedural areas include 1) compliance, 2) definition of mobility, 3) data for local school authorities upon delivery, 4) permanent data plate, 5) bond and contract requirements, 6) design data, samples, brochures, etc., and 7) approved manufacturers, design areas are mentioned as, 1) dimension requirements, 2) structural design, 3) construction materials, 4) windows and shades, 5) doors, 6) steps and landings, 7) teaching aids and storage facilities, 8) interior finishes, 9) mechanical systems, and 10) site location. (MM)

Availability:

Office of Schoolhouse Planning
State Educational Finance Commission
Columbia, South Carolina 29201

EF 001793

The Portable Classroom Impact on Educational Programs and School Facility Financing in California (A Presentation Made to a Subcommittee of the State Allocation Board on January 18, 1968)

By - Gibson, Charles D. and Eatough, Clair L.
Published - January 1968
007 pages

Descriptors:

*Classroom Research, *Educational Policy, *Educational Finance, *Educational Programs, *Mobile Classrooms, Cost Effectiveness, Building Design, Program Evaluation, State Surveys

A discussion of portable classrooms in California including the extent of their use, the reasons for their purchase, public attitudes toward them, some possible limitations, and a statement of policy regarding their use by the California Bureau of School Planning. The paper concludes that before policy implementations are imposed on portable classrooms a new survey be undertaken which would assess their benefits in terms of educational goals and establish their true and total costs. (FP0)

Availability:

Charles D. Gibson, Chief
Bureau of School Planning
State Department of Education
Sacramento, California 95814

EF 001792

Supplemental Educational Facilities

By - Lincoln, Walter Stephen
Published - May 1968
004 pages

Descriptors:

*Building Innovation, *Component Building Systems, *Prefabrication,
*Structural Building Systems, Mobile Classrooms, Urban Schools

Discussion of a project for the creation of an economic, compact, relocatable supplemental educational facility is presented. Research on relocatable school facilities showed 1) individual classroom units one story in height were tried in a variety of arrangements and were found to be only partially successful, 2) no one to date had developed any techniques of concentrating relocatable units into a school facility, and 3) the general spatial requirements of a new school could be accommodated within a reasonable sized module. The resultant system developed allows for a variety of spatial configurations and consists of self-contained structural units supporting a system of prefabricated mechanical modules. Several diagrams and possible plan utilizations illustrate the concept. (MH)

Availability:

New Life for Old Schools Newsletter, No. 28, May 1968
Research Council of the Great Cities Program for School Improvement
4433 West Touhy Avenue
Chicago, Illinois 60646

EF 000854

Functional Schools Relative Values of Permanent Vs. Temporary or
Portable Buildings

By - Lofgren, Rudolf A.
Published - October 1955
003 pages

Descriptors:

*Flexible Facilities, *Mobile Classrooms, *School Expansion

Development of school district needs and their interaction to economic considerations should be studied as a primary stage of facility choice. Three types of non-permanent schools are discussed: 1) temporary, 2) portable, and 3) demountable. Factors of 1) site, 2) climate and building codes, and 3) construction method and economy are significant considerations which influence feasibility and facility type selection. (MH)
(Association of School Business Officials. Proceedings of 41st Annual Convention.)

Availability:

Dr. Charles Foster, Executive-Secretary
Association of School Business Officials of the United States and
Canada
2424 West Lawrence Avenue
Chicago, Illinois 60625

EF 000849

Functional Schools, Relative Values of Permanent Vs. Temporary or Portable Buildings

By - Ganster, William A.
Published - October 1955
003 pages

Descriptors:

*Building Design, *Component Building Systems, *Flexible Classrooms,
*Prefabrication, *School Construction, Movable Partitions

Architect William Ganster believes that temporary or portable buildings are only justified if a school district is under such financial duress that it cannot provide permanent buildings. A temporary building duplicates in part the requirements of a permanent building - however, if the term "temporary" is used factually, it implies demolition at some future date of those components of a permanent structure that would have to be replaced after the temporary building is removed. He continues, a school district might be better advised to build what is commonly called the shell of a building which would provide in part all the facilities that a temporary building would provide in its entirety. Mr. Ganster also feels that even though flexibility may be greater in an open space classroom, it, in the long run, may be wasteful economically for the school system that wants to put every square foot to use. He calls two structural innovations to the reader's attention: 1) the use of prefabricated curtain walls consisting of colored material fused onto either steel or aluminum paneling and an aluminum modular-sized sash, and 2) a demountable space frame or unistrut system - this type of building is completely demountable with the exception of the footings. (RH)

(Association of School Business Officials. Proceedings of 41st Annual Convention.)

Availability:

Dr. Charles Foster, Executive-Secretary
Association of School Business Officials of the United States and
Canada
2424 West Lawrence Avenue
Chicago, Illinois 60625

EF 001482

Information and Operating Procedures Regarding Temporary Classrooms
on School Property

By - Johnson, Herbert F.
Published - November 1965
002 pages

A short discussion of legal implications of temporary classroom buildings including 1) their classification as personal property, 2) rental with option to purchase, and 3) lease purchase. (NI)

Availability:
Herbert F. Johnson
New York State Department of Education
Albany, New York 12224

EF 000523

Supplementary Classroom

001 pages

Descriptors:
*Mobile Classrooms

Description of individual movable classroom units used for 5 to 6 year temporary installations is presented. The 24 feet X 32 feet units are adaptable for mechanical, administrative, and classroom usage and may be joined to form larger spaces. The plywood units cost approximately \$6000 and have a 17 percent moving cost. Stated advantages include, 1) immediately available spatial facilities, 2) economical use of land prior to permanent construction, and 3) flexibility affording the potential of usage study and manipulation. (MH)

Availability:
American Plywood Association
1119 A Street
Tacoma, Washington 98401

LF 000526

Supplementary Classroom

001 pages

Descriptors:

*Classroom Design, *Mobile Classrooms, Building Materials,
Flexible Facilities

A floor plan, wall section, and exterior photograph of one of 58 classroom units purchased for Tuscon, Arizona, are given. The \$8300 units can be moved as complete buildings, thus eliminating removal of interior furnishings. Construction of the 24 feet X 40 feet classrooms is primarily of plywood. (MH)

Availability:

See below.

EF 00527

Supplementary Classroom

002 pages

Descriptors:

*Building Design, *Classroom Design, *Classrooms, *Prefabrication,
*School Construction

A classroom unit developed by Douglas Fir Plywood Association to be moved as a complete unit is described in this article. It can be constructed of plywood components or with standard construction methods with plumbing that can be incorporated into the corner storage area. The building is 24 feet by 40 feet and costs approximately \$8.00 per square foot. Construction details covering plywood components and standard fabrication are available from the Douglas Fir Plywood Association. Photographs, floor plan, and cross section are included. (RK)

Availability:

American Plywood Association
1119 A Street
Tacoma, Washington 98401

EF 000959

Specifications for Supplementary Classroom Units Stressed Skin
Panel

By - Waring, Robert Bruce, and Brown, Daniel H., and Gordon, Walter
Published - 1962
032 pages

Descriptors:

*Building Materials, *Construction, *Mobile Classrooms, *Self-
Contained Classrooms, *Specifications, Building Trades

Complete outline specifications are given for the construction of supplementary classroom units using stressed skin panels. Sections included are 1) concrete and related work, 2) masonry, 3) structural and miscellaneous metal, 4) curtain walls and metal windows, 5) carpentry and related work, 6) roofing, sheet metal, and related work, 7) painting, glazing, and related work, 8) floor covering and furnishing, 9) building specialties, and 10) electrical work. (MH)

Availability:

American Plywood Association
1119 A Street
Tacoma, Washington 98401

EF 000960

Specifications for Supplementary Classroom Units Standard
Construction and Preframed Construction

By - Waring, Robert Bruce, and Brown, Daniel H., and Gordon, Walter
Published - 1962
034 pages

Descriptors:

*Building Design, *Classrooms, *Classroom Design, *Mobile Classrooms

The standards that should be applied to the construction of supplementary classroom units are discussed in this report. Areas dealt with are 1) general mechanical and electrical work, 2) concrete, 3) masonry, 4) miscellaneous steel and iron, 5) metal windows, 6) carpentry at site, 7) fir plywood components, 8) millwork, 9) acoustic treatment, 10) thermal installation, 11) finish hardware, 12) built-up roofing, 13) sheet metal, 14) painting and decorating, 15) glass and plastic glazing, 16) caulking, 17) chalkboard, tackboard, and pegboards, 18) resilient floor covering, and 19) detailed floor plans. (RK)

Availability:

American Plywood Association
1119 A Street
Tacoma, Washington 98401

EF 001075

Stretch Educational Dollars Further with School Buildings
Planned with Plywood

018 pages

A survey reporting on the various ways that plywood is used in school construction in various parts of the county. One particular report from West Palm Beach, Florida concerns the construction of a supplementary classroom by the local "Dads Club." (NI)

Availability:
See below.

EF 001076

Supplementary Classroom

020 pages

Descriptors:

*Classroom Design, *Component Building Systems, *Mobile Classrooms, Self-Contained Classrooms

Three prototype portable classrooms were developed for both conventional and component construction. One of these economical units was built for \$7.50 per square foot. Construction of each type is explained through use of photographs and text. Included in the presentation are 1) cluster grouping suggestions, 2) interior and exterior photographs, and 3) elevations, sections, and a floor plan. (MH)

Availability:
American Plywood Association
1119 A Street
Tacoma, Washington 98401

EF 001077

Time and Cost Information (Supplementary Classrooms)

010 pages

Descriptors:

*Classroom Arrangement, *Classrooms, *School Space, *Component Building Systems, Classroom Design, Prefabrication, School Construction, School Planning

A final report for time study to erect component parts of supplemental classrooms for the Franklin Pierce School District, Tacoma, Washinton, presents an analysis of the sub-structure, floor system, walls, roof, trim, window frames, sunscreen, and doors with reference to "man minutes" time for each part. (N1)

Availability:

American Plywood Association
1119 A Street
Tacoma, Washington 98401

EF 000106

Relocatable School Facilities

Published - 1964
074 pages

Descriptors:

*Educational Facilities, *Mobile Classrooms, *Mobile Educational Services, *Urban Schools, Flexible Facilities

Availability:

Educational Facilities Laboratories, Inc.
477 Madison Avenue
New York, New York 10022

EF 000505

Instant Schoolhouses

By - Abiko, Nobuo
005 pages

Descriptors:

*Architecture, *Component Building Systems, *Prefabrication,
*Mobile Classrooms, School Design

Availability:

Nobuo Abiko
Department of Architecture
Massachusetts Institute of Technology
Cambridge, Massachusetts 02139

EF 000844

Experiences in the Relative Values of Permanent Vs. Portable
Buildings

By - Mayhall, Temple B.
Published - October 1955

(Association of School Business Officials. Proceedings of 41st Annual
Convention.)

Availability:

Dr. Charles Foster, Executive-Secretary
Association of School Business Officials of the United States
and Canada
2424 West Lawrence Avenue
Chicago, Illinois 60625

EF 000309

Armco Building Systems for School Facilities

022 pages

Descriptors:

*Facilities, *School Design, *Component Building Systems,
Schools, Mobile Classrooms, Auditoriums, Gymnasiums

Availability:

Armco Steel Corporation
703 Curtis Street
Middletown, Ohio 45042